

L Number	Hits	Search Text	DB	Time stamp
1	106	monosilicide and disilicide	USPAT; US-PGPUB	2003/03/19 14:03
2	152	"mono-silicide" or monosilicide	USPAT; US-PGPUB	2003/03/19 14:03
3	1455	"di-silicide" or disilicide	USPAT; US-PGPUB	2003/03/19 14:04
4	130	("mono-silicide" or monosilicide) and ("di-silicide" or disilicide)	USPAT; US-PGPUB	2003/03/19 14:04
5	27457	xenon	USPAT; US-PGPUB	2003/03/19 14:04
6	5	((("mono-silicide" or monosilicide) and ("di-silicide" or disilicide)) and xenon	USPAT; US-PGPUB	2003/03/19 14:07
7	28036	silicid\$	USPAT; US-PGPUB	2003/03/19 14:08
8	8	xenon with silicid\$	USPAT; US-PGPUB	2003/03/19 14:08
9	8	(xenon with silicid\$) not (((("mono-silicide" or monosilicide) and ("di-silicide" or disilicide)) and xenon)	USPAT; US-PGPUB	2003/03/19 14:09
10	6923	"xenon lamp"	USPAT; US-PGPUB	2003/03/19 14:09
11	4449	rta	USPAT; US-PGPUB	2003/03/19 14:09
12	31	"xenon lamp" and rta and silicid\$	USPAT; US-PGPUB	2003/03/19 14:39
13	6541	xenon	EPO; JPO; DERWENT; IBM_TDB	2003/03/19 14:40
14	492	rta	EPO; JPO; DERWENT; IBM_TDB	2003/03/19 14:40
15	21916	silicid\$	EPO; JPO; DERWENT; IBM_TDB	2003/03/19 14:40
16	0	xenon and rta and silicid\$	EPO; JPO; DERWENT; IBM_TDB	2003/03/19 14:40
17	13	xenon and silicid\$	EPO; JPO; DERWENT; IBM_TDB	2003/03/19 14:40
-	1410	(438/627,643,653).CCLS.	USPAT; US-PGPUB	2003/03/19 14:02
-	497	(438/663,664).CCLS.	USPAT; US-PGPUB	2003/03/18 18:35
-	30	((438/627,643,653).CCLS.) and xenon	USPAT; US-PGPUB	2003/03/18 18:40
-	10	xenon and ((438/663,664).CCLS.)	USPAT; US-PGPUB	2003/03/18 18:40

(FILE 'HOME' ENTERED AT 17:01:34 ON 19 MAR 2003)

FILE 'INSPEC' ENTERED AT 17:01:56 ON 19 MAR 2003

E SILICIDE+ALL/CT

L1	7805 SILICIDE
L2	2796 RTA
L3	16397 XENON
L4	0 L1 AND L2 AND L3

DERWENT-ACC-NO: 1997-010536
DERWENT-WEEK: 199701
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Forming of integrated circuits of
micro-circuits with Schottky diodes -
includes ion implantation in contact openings in
areas for high-barrier
Schottky diodes by acceptor dopant and forming of
contacts of titanium
di-silicide

INVENTOR: BONDAR, D M; KASTRYULEV, A N ;
KOROLKOV, S N

PATENT-ASSIGNEE: ELTRN TECH RES INST[ELTER]

PRIORITY-DATA: 1991SU-4916949 (March 5, 1991)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
SU 1814432 A1	April 20, 1996	N/A
005	H01L 021/265	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
	APPL-DATE	
SU 1814432A1	N/A	

1991SU-4916949

March 5, 1991

INT-CL (IPC): H01L021/265

ABSTRACTED-PUB-NO: SU 1814432A

BASIC-ABSTRACT: Low-ohmic areas of a n+ concealed layer are formed in an initial silicon substrate and an epitaxial layer is grown to a thickness of 1.5-2.0 μm , before photolithographic processing, oxidn., diffusion and ion implantation are used to form active and passive elements of integrated micro-circuits. Contact openings in a dielectric coating are uncovered to the ohmic contact areas and Schottky diodes and, after removal of the photoresist, photolithographic processing is carried out, to form areas of high-barrier diodes and boron is implanted with an energy of 30 KeV and an ion concn. of $4.5 \times 10^{12} \text{ cm}^{-2}$. A titanium layer is applied by magnetron atomisation and titanium disilicide is formed during simultaneous electro-activation of the boron ions by irradiation using a non-coherent light flow of xenon lamps with a power of 50 Joules/ cm^2 . Siliciding and electro-activation can also be carried out by thermo-vacuum annealing at 670deg.C for 30 mins. during a pressure of 10^{-6} mm . of mercury. The titanium layer is removed from the

dielectric coating and
contact electrodes and inter-connections are formed.

USE - Used for mfr. of bipolar micro-circuits with
Schottky diodes.

ADVANTAGE - Better quality and reliability of
micro-circuit are attained.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:

FORMING INTEGRATE CIRCUIT MICRO CIRCUIT
SCHOTTKY DIODE ION IMPLANT CONTACT OPEN
AREA HIGH BARRIER SCHOTTKY DIODE ACCEPT
DOPE FORMING CONTACT TITANIUM DI
SILICIDE

DERWENT-CLASS: L03 U11

CPI-CODES: L04-C02B; L04-C06; L04-C16;

EPI-CODES: U11-C02B2; U11-C02J5;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1997-002767

Non-CPI Secondary Accession Numbers:

N1997-009303